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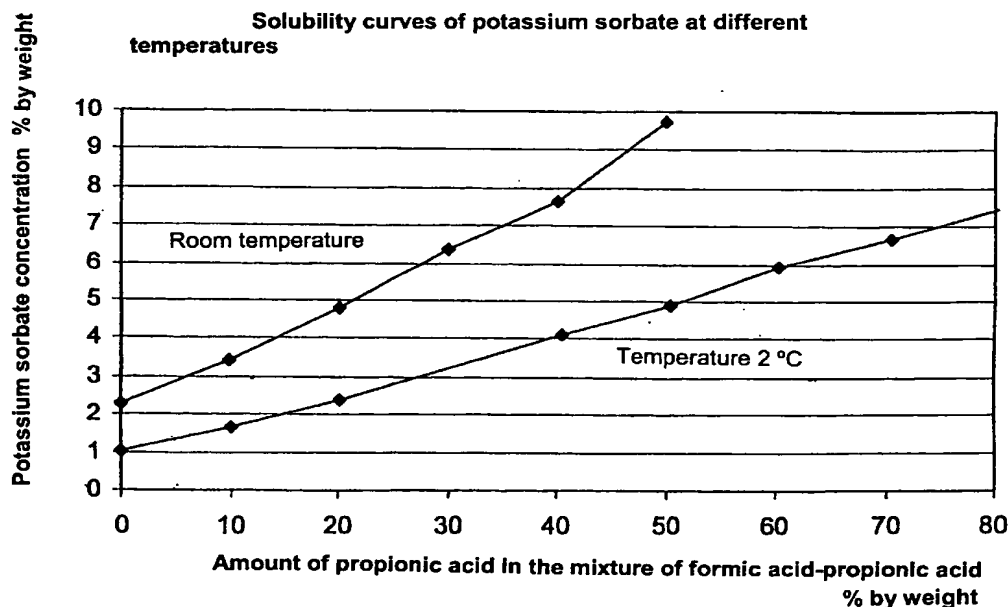
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- (75) Inventors/Applicants (*for US only*): MIETTINEN, Harri [FI/FI]; Wiikintie 4 A 3, FIN-02400 Kirkkonummi (FI). LÖFGREN, Timo [FI/FI]; Hannikka 32 A, FIN-02360 Espoo (FI).
- Published:
— with international search report

[Continued on next page]

(54) Title: GROWTH PROMOTOR



(57) Abstract: The invention relates to an animal growth promoting composition. The liquid solution comprises 1.1 to 5 % by weight of sorbic acid or a sorbate calculated as sorbic acid, 45 to 93.9 % by weight of formic acid and 5 to 50 % by weight of propionic acid. The invention also relates to a method for preparing the composition and to its use.

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see PCT Gazette No. 02/2005 of 13 January 2005, Sec-
tion II

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 03/00504

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: A23K 1/16

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: A23K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL WPI DATA, CAPLUS, FSTA, CABA, BIOSIS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	Livestock Production Science, Volume 73, 2002, Kirsi Partanen et al, "Performance of growing-finishing pigs fed medium- or high-fibre diets supplement with avilamycin, formic acid or formic acid - sorbate blend", pages 139-152, --	1-16
A	EP 1205115 A2 (NUTRINOVA NUTRITION SPECIALITES & FOOD INGREDIENTS GMBH), 15 May 2002 (15.05.02) --	1-16
A	US 4083999 A (DRURY ET AL), 11 April 1978 (11.04.78) --	1-16

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

30 Sept 2003

Date of mailing of the international search report

08-10-2003

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 03/00504

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0701778 A2 (HOECHST AKTIENGESELLSCHAFT), 20 March 1996 (20.03.96) --	1-16
A	GB 1452169 A (FEED SERVICE (LIVESTOCK) LIMITED), 13 October 1976 (13.10.76) -- -----	1-16

INTERNATIONAL SEARCH REPORT

International application No.
PCT/FI 2003/000504

Box No. II Observations where certain claims were found unsearchable (Continuation of Item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: **13-16**
because they relate to subject matter not required to be searched by this Authority, namely:
see next page
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No.
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Claims 13-16 relate to methods of treatment of the human or animal body by surgery or by therapy or diagnostic methods practised on the human or animal body (**PCT Rule 39.1(iv)**). Nevertheless, a search has been executed for these claims. The search has been based on the alleged effects of the compounds or compositions

INTERNATIONAL SEARCH REPORT

Information on patent family members

06/09/03

International application No.

PCT/FI 03/00504

Patent document cited in search report			Publication date	Patent family member(s)	Publication date
EP	1205115	A2	15/05/02	AU 8933901 A	16/05/02
				DE 10055390 A	29/05/02
				JP 2002191293 A	09/07/02
				NZ 514923 A	25/07/03
				US 2002086090 A	04/07/02
US	4083999	A	11/04/78	NONE	
EP	0701778	A2	20/03/96	BR 9504056 A	24/09/96
				CN 1131514 A	25/09/96
				CZ 9502424 A	17/04/96
				DE 19510158 A	28/03/96
				DE 29521537 U	30/04/98
				FI 954362 A	20/03/96
				JP 8173058 A	09/07/96
				US 5888569 A	30/03/99
GB	1452169	A	13/10/76	FR 2267710 A,B	14/11/75